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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,333

09/13/2005

Pinchas Shalev

127/04736

6693

44909

7590

04/14/2009

PRTSI

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EXAMINER

RALIS, STEPHEN J

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,333	Applicant(s) SHALEV ET AL.	
	Examiner STEPHEN J. RALIS	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-22 is/are pending in the application.
- 4a) Of the above claim(s) 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/6/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant is respectfully requested to provide a location within the disclosure to support any further amendments to the claims due to when filing an amendment an applicant should show support in the original disclosure for new or amended claims. See MPEP § 714.02 and § 2163.06 ("Applicant should specifically point out the support for any amendments made to the disclosure.").

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 January 2009 has been entered.

Response to Amendment/Arguments

4. Applicant's arguments with respect to claims 1-5 and 7-15 have been considered but are moot in view of the new ground(s) of rejection as set forth below.

Election/Restrictions

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

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- I. Claims 1-5 and 7-15, drawn to a hair cutting apparatus, classified in class 219, subclass 222.
- II. Claims 16-22, drawn to method of shaving, classified in class 83, subclass 16.

The inventions are distinct, each from the other because of the following reasons:

6. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case, the product can be used for a materially different process such as a method of cutting and/or trimming hair or fabric.

7. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

8. Newly submitted claims 16-22 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons as set forth above.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 16-22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elongate elements having a long dimension terminating in one free end which is not attached to the base, such that the elongate elements point to a space between the unattached ends of said elements, the space defining an opening in the head must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

9. Claims 1-5 and 7-15 are objected to because of the following informalities: the claims recite “elongate ...” through the claim set. The claims should read –elongated ...– wherever appropriate to provide clear and consistent language through the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1-5 and 7-22 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, claim 1 recites the limitation “such that the elongate elements point to a space between the unattached ends”. The examiner can find no disclosure to such a structure. The examiner can find disclosure to "In a preferred embodiment of the invention the long axis of the elongate elements is parallel to the plane of the opening or at a small (5, 10, 15, or 20 degrees) with respect to the plane (page 12, lines 1-12). There is no disclosure to the direction of the small angle (sic) with respect to the plane defined by opening. Therefore, the recitation to “such that the elongate elements point to a space between the unattached ends” is deemed new matter.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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13. Claims 1-5, 7-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the elements" in line 4, the limitation "the elongate elements" in lines 6 and 7, and the limitation "the unattached ends" in lines 7-8. Claim 2 recites the limitation "the elongated elements both rows of skin depressing elements" in lines 1, 2. Claim 3 recites the limitation "the two or more rows of skin depressing elements" in lines 1-2. There is insufficient antecedent basis for these limitations in the claims.

14. Claims 1-5, 7-15 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: claim 1 recites the limitation, "the elements", "two rows of elongate skin depressing elements", "the elongate elements" and "both rows of element". The examiner queries applicant to the relationship of these elements, furthermore, explicitly to whether they are the same element are different elements. In addition, claim 1 recites the limitation "such that the elongate elements point to a space between the unattached ends". It is unclear and indefinite to the structural relationship between the elongate elements and how or where they point. Further clarification is required.

In general, the claims are replete with such 35 U.S.C. 112, second paragraph issues. The above notes are exemplary with respect to all of the 35 U.S.C. 112, second

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paragraph rejections present in the instant case, all claims must be carefully reviewed and appropriate corrections should be made in response to this rejection.

15.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1-5, 7, 8, 10 and 14, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (U.S. Patent No. 3,093,724).

Johnson discloses a hair cutting head (see Figures 1-4), for use in a hair shaving apparatus and having a portion adapted for contacting an area of skin having hair, the head comprising: a) a base (end plates 7, 8) on which the elements of the head are mounted, b) at least two rows of elongate skin depressing elements (tapered teeth 1, 2) mounted on the base (end plates 7, 8; see Figures 1, 3), the elongate elements (tapered teeth 1, 2) having a long dimension terminating in one free end (the ends of the tapered teeth 1, 2 that are not in communication with the end plates 7, 8; see Figure 1) which is not attached to the base (end plates 7, 8), such that the elongate elements

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point to a space (longitudinal slot 3) between the unattached ends of said elements (see Figures 3, 4), the space (longitudinal slot 3) defining an opening in the head; c) a heat generating elongated element (longitudinal wire blade 4) situated in the opening (see Figures 1, 3, 4), positioned close enough to the opening such that the heat generating elongated element may touch the skin surface against which the long dimensions of both rows of elements are pressed, the heat generating element being capable of producing heat sufficient to cut hair, when electrified; and a controller (electric current may be regulated by a suitable rheostat; column 2, lines 17-18) for controlling the heat generating elongated element to prevent heat from being applied continuously in a single area for sufficient time to cause skin damage.

With respect to the limitation of a heat generating elongate element situated in the opening, positioned close enough to the opening such that the heat generating elongated element may touch a skin surface against which the long dimensions of both rows of elements are pressed, the heat generating elongated element being capable of producing heat sufficient to cut hair, when electrified, the recitation to “such that the heat generating elongated element may touch a skin surface against which the long dimensions of both rows of elements are pressed” is deemed intended use. It has been held that a recitation with respect to the manner in which the claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (see MPEP § 2114). Johnson explicitly discloses the heat generating elongated element (heated longitudinal wire blade 4) situated in the opening (longitudinal slot 3) to cut hair at a desired length. There

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is no disclosure within Johnson to the actual orientation of the “electric hair singeing device” when being used. Furthermore, there is no disclosure precluding the “electric hair singeing device” from being utilized in an off-axis-angled orientation in which tapered teeth (2) are angled toward and closest to the skin of a user with the tapered teeth (1, 2) and the heat generating elongated element (heated longitudinal wire blade 4) all touching the skin. In addition, Johnson explicitly discloses “the blade being adjustable downwardly with the slot to expose it below the shorter teeth for maximum singeing effect” (column2, lines 4-6, claim 2). There is no disclosure to how far the blade may be adjusted downwardly below the shorter teeth, however, there is disclosure to the exposure of the heated blade being below the shorter teeth which would contact skin. Therefore since Johnson discloses the structural limitations of the recited claims, Johnson fully meets “a heat generating elongate element situated in the opening, positioned close enough to the opening such that the heat generating elongated element may touch a skin surface against which the long dimensions of both rows of elements are pressed, the heat generating elongated element being capable of producing heat sufficient to cut hair, when electrified” given its broadest reasonable interpretation.

With respect to the limitations of claim 2, Johnson discloses the tapered teeth (1, 2) of Figure 1 in a cross-section forming a plane in Figure 4. This cross-sectional plane is in the same plane as the axes of the long dimensions of the tapered teeth (1, 2) which would be in a “0” angle relationship with the axes of the long dimensions of the tapered teeth (1, 2) and the plane defined in Figure 4 . Therefore, Johnson, fully meets “the

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elongated elements both rows of skin depressing elements form a single plane to within less than about 20 degrees between the axes of the long dimensions" given its broadest reasonable interpretation.

With respect to the limitations of claims 3 and 8, Johnson discloses the two or more rows of skin depressing elements (two sets of tapered teeth 1, 2) being separated by a gap (longitudinal slot 3) in which the heat generating elongate element (heated longitudinal wire blade 4) is located (see Figures 1-4).

With respect to the limitations of claims 4, 5 and 7, Johnson discloses which the heat generating elongate element (heated longitudinal wire blade 4) being suspended on a frame (threaded portions 4') moveable mounted on the base (end plates 7, 8) and two adjuster mechanism (nuts 8') placed side by side of the heat generating elongate element (heated longitudinal wire blade 4) between the frame (threaded portions 4') and the base (end plates 7, 8) (see Figure 2).

With respect to the limitations of claims 10 and 14, Johnson discloses a hand held hair cutting apparatus (Figure 1, 3) further including a power source (not shown; column 2, lines 7-10) that is adapted to be pressed against the skin of a user and cut hair on the skin (Title).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Claims 9 and 11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Hashimoto. (U.S. Patent No. 5,064,993).

Peterson discloses all of the limitations of the claimed invention, as previously set forth, except for specifically calling for the head also including at least two mounting pins

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electrically connected to the heat generating elongate element and the hair cutting apparatus including matching mounting sockets, electrically connected to the source.

However, at least two mounting pins being electrically connected to the elongated element with the main apparatus including matching mounting sockets electrically connected to the source is known in the art. Hashimoto, for example, teaches a hair cutting apparatus comprising an electrical heating element (3) on at least two supporting pins (two terminals 32, 33) which extend to projecting terminals (34, 35) (column 3, lines 52-58). In addition, Hashimoto teaches a complementary mounting structure (corresponding first and second receptacles 51, 52; column 4, lines 17-34; see Figures 3A-3C, 4, 5, 6). Hashimoto further teaches the advantage of such a configuration provides a support which tautly holds the heating wire to be slidably and removably positioned within the apparatus, thereby allowing easy removal of the support in order to access the wire if such should break or need repair. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Johnson with the support and mounting pins head with corresponding apparatus receptacles of Hashimoto in order to provide a support which tautly holds the heating wire to be slidably and removably positioned within the apparatus, thereby allowing easy removal of the support in order to access the wire if such should break or need repair.

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23. Claims 12 and 13, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Parker et al. (U.S. Patent No. 6,481,104).

Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a housing and also including means for vibrating the elongate element in a direction perpendicular to a long dimension thereof; and the means for vibrating being operative to vibrate the head with a motion causing said vibration of the elongate element.

However, a vibrating shaving system including a means to vibrate a shaving head in a direction perpendicular to the long dimension of the housing and the means for vibrating the head and causing the shaving head to vibrate is known in the art. Parker, et al., for example, teach vibrating shaving systems comprising a small DC motor (100) being secured within the housing (10) to channel (80) and the motor shaft (110) being secured to eccentric or off-center weight (120) to create a mechanical vibratory excursion (Δ) (Abstract; column 1, lines 40-47; column 3, lines 16-29; column 4, lines 3-6). Parker et al. further teach that such a configuration provides a reduction of friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience (column 2, lines 1-5, 27-28; column 4, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Johnson with the means for vibrating of Parker et al. in order to provide a reduction of friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience.

24. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Tse et al. (U.S. Patent No. 6,452,501).

Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means, as described by Tse et al., is known in the art. Tse et al. teach an automatic shut-off (ASO) and indication device utilizing a motion sensor, hand sensor or touch sensor as being particularly useful in electric pressing irons, but implementation in other electric heating appliances, such as hair dryers and other hand-held or stationary heating appliances being possible as well (column 2, lines 1-3, 31-36; column 3, lines 38-41). Tse et al. further teach the motion/orientation sensor (116; see Figure 4, 7) connected to a microcontroller (122) that disables the power to the heater (12) (column 3, line 39 – column 4, line 67) to prevent hazardous situations when the heating appliance is left unattended (column 1, lines 28-31), thereby increasing the operational safety of the device. In view of Tse et al., it would have been obvious to one of ordinary skill in the art at the time of the invention to place a motion detector and controller in the operational handle of the shaving device to detect motion and prevent hazardous situations when the heating appliance is left unattended, thereby increasing the operational safety of the device.

25. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 3,093,724) in view of Shalev et al. (International Publication No. WO 03/009976 A1).

Johnson discloses all of the limitations of the claimed invention, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin; and the one or more adjuster mechanisms adjusting the position of the heat generating elongate element responsive to detection by said motion detector.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means and control the width of a heating element is known in the art. Shalev, for example, teach a velocity detector (1070) or a mechanical velocity detector (1062) that is used to determine velocity. Shalev et al. further teach the advantage of such a configuration provides the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements (page 17, line 26 – page 19, line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Johnson with the motion velocity detector (1070, 1062) in order to provide the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements.

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26. Claims 1-5, 7-11 and 14, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (U.S. Patent No. 5,064,993) in view of Johnson (U.S. Patent No. 3,093,724).

Hashimoto discloses a hair cutting head (see Figures 1-4,7-16), for use in a hair shaving apparatus and having a portion adapted for contacting an area of skin having hair, the head comprising: a) a base (back end of comb tooth portion 1) on which the elements of the head are mounted, b) at least two rows of elongate skin depressing elements (comb tooth plates 1a, 1b) mounted on the base (back end of comb tooth portion 1), the elongate elements (comb tooth plates 1a, 1b) having a long dimension terminating in one free end (the ends of the comb tooth plates 1a, 1b are not in communication with back end of comb tooth portion 1; see Figure 1A, 12) which is not attached to the base (back end of comb tooth portion 1), such that the elongate elements point to a space between the unattached ends of said elements (see Figures 1B, , 2B, 2C, 3B, 3C, 10-12), the space defining an opening in the head; c) a heat generating elongated element (electrical heating wire 3) situated in the opening (see Figures 1A-4, 10-12, 14), the heat generating element being capable of producing heat sufficient to cut hair, when electrified (whole document); and a controller (pushbuttons 5, 5a, 5b and power supply circuit 58; column 8, lines 39-50) for controlling the heat generating elongated element to prevent heat from being applied.

With respect to the limitations of claim 2, Hashimoto discloses the comb tooth plates (1a, 1b) of Figure 2A in a cross-section forming a plane in Figures 2B 2C. This cross-sectional plane is in the same plane as the axes of the long dimensions of the

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comb tooth plates (1a, 1b) which would be a “0” angle relationship of the axes of the long dimensions of the comb tooth plates (1a, 1b) and the plane defined in Figures 2A, 2C . In addition, if the plane is defined by the end of the comb tooth plates (1a, 1b), Figure 2A discloses the ends of the comb tooth plates (1a, 1b) being approximately flat with would create a plane that is approximately “0” with respect to the axes of the long dimensions of the comb tooth plates (1a, 1b). Therefore, Hashimoto, fully meets “the elongated elements both rows of skin depressing elements form a single plane to within less than about 20 degrees between the axes of the long dimensions” given its broadest reasonable interpretation.

With respect to the limitations of claims 3 and 8, Hashimoto discloses the two or more rows of skin depressing elements (comb tooth plates 1a, 1b) being separated by a gap (see Figures 2B, 2C, 3B, 3C10, 11) in which the heat generating elongate element (electrical heating wire 3) is located (see Figures 1A-4, 10-12, 14).

With respect to the limitations of claims 9 and 11, Hashimoto discloses a hair cutting apparatus comprising an electrical heating element (3) on at least two supporting pins (two terminals 32, 33) which extend to projecting terminals (34, 35) (column 3, lines 52-58). In addition, Hashimoto teaches a complementary mounting structure (corresponding first and second receptacles 51, 52; column 4, lines 17-34; see Figures 3A-3C, 4, 5, 6).

With respect to the limitations of claims 10 and 14, Hashimoto discloses a hand held hair cutting apparatus (whole document) further including a power source (batteries

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BH) that is adapted to be pressed against the skin of a user and cut hair on the skin (whole document).

Hashimoto discloses all of the limitations of the claimed invention, as previously set forth, except for the heat generating elongated element being positioned close enough to the opening such that the heat generating elongated element may touch the skin surface against which the long dimensions of both rows of elements are pressed; a heat generating elongated element being suspended on a frame moveable mounted on a base and one or more adjuster mechanism mounted between the frame and the base, wherein the one or more adjuster mechanisms adjusts the angle/overall position of the heat generating elongated element with respect to a plane of the opening.

However, a heat generating elongate element being suspended on a frame moveable mounted on a base and one or more adjuster mechanism juxtaposed between the frame and the base, wherein the one or more adjuster mechanisms adjusts the angle/overall position of the heat generating elongate element with respect to a plane of the opening. Johnson, for example, teaches the heat generating elongate element (heated longitudinal wire blade 4) being suspended on a frame (threaded portions 4') moveable mounted on the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) and two adjuster mechanism (nuts 8') placed side by side of the heat generating elongate element (heated longitudinal wire blade 4) between the frame (threaded portions 4') and the base (rear end of connection portion in combination with the non-tapered portions the two sets of tapered teeth 1, 2) (see Figure 2). The nuts (8') are used to adjust the

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longitudinal wire blade (4) up and down within the longitudinal slot (3) (column 2, lines 11-16), thereby adjusting the angle of the longitudinal wire blade (4) within the longitudinal slot (3).

With respect to the limitation of the heat generating elongated element being positioned close enough to the opening such that the heat generating elongated element may touch the skin surface against which the long dimensions of both rows of elements are pressed, Johnson explicitly discloses the heat generating elongated element (heated longitudinal wire blade 4) situated in the opening (longitudinal slot 3) to cut hair at a desired length. There is no disclosure within Johnson to the actual orientation of the “electric hair singeing device” when being used. Furthermore, there is no disclosure precluding the “electric hair singeing device” from being utilized in an off-axis-angled orientation in which tapered teeth (2) are angled toward and closest to the skin of a user with the tapered teeth (1, 2) and the heat generating elongated element (heated longitudinal wire blade 4) all touching the skin. Therefore since Johnson discloses the structural limitations of the recited claims, Johnson fully meets “a heat generating elongate element situated in the opening, positioned close enough to the opening such that the heat generating elongated element may touch a skin surface against which the long dimensions of both rows of elements are pressed, the heat generating elongated element being capable of producing heat sufficient to cut hair, when electrified” given its broadest reasonable interpretation.

Johnson further teaches the advantage of such a configuration provides a mechanism to vary the singeing effect (column 1, lines 20-21), thereby increasing the

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versatility of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hashimoto with the variable position adjuster mechanism of Johnson in order to provides a mechanism to vary the singeing effect, thereby increasing the versatility of the device.

27. Claims 12 and 13, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (U.S. Patent No. 5,064,993) in view of Johnson (U.S. Patent No. 3,093,724) as applied to claims 1-5 and 7-14 above, and further in view of Parker et al. (U.S. Patent No. 6,481,104).

Hashimoto in view of Johnson discloses all of the claimed limitations, as previously set forth, except for a housing and also including means for vibrating the elongate element in a direction perpendicular to a long dimension thereof; and the means for vibrating being operative to vibrate the head with a motion causing said vibration of the elongate element.

However, a vibrating shaving system including a means to vibrate a shaving head in a direction perpendicular to the long dimension of the housing and the means for vibrating the head and causing the shaving head to vibrate is known in the art. Parker, et al., for example, teach vibrating shaving systems comprising a small DC motor (100) being secured within the housing (10) to channel (80) and the motor shaft (110) being secured to eccentric or off-center weight (120) to create a mechanical vibratory excursion (Δ) (Abstract; column 1, lines 40-47; column 3, lines 16-29; column 4, lines 3-6). Parker et al. further teach that such a configuration provides a reduction of

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friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience (column 2, lines 1-5, 27-28; column 4, lines 10-16). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hashimoto in view of Johnson with the means for vibrating of Parker et al. in order to provide a reduction of friction between the cutting element and the user's skin, thereby providing a more comfortable shaving session experience.

28. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (U.S. Patent No. 5,064,993) in view of Johnson (U.S. Patent No. 3,093,724) as applied to claims 1-5 and 7-14 above, and further in view of Tse et al. (U.S. Patent No. 6,452,501).

Hashimoto in view of Johnson discloses all of the claimed limitations, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means, as described by Tse et al., is known in the art. Tse et al. teach an automatic shut-off (ASO) and indication device utilizing a motion sensor, hand sensor or touch sensor as being particularly useful in electric pressing irons, but implementation in other electric heating appliances, such as hair dryers and other hand-held or stationary heating appliances being possible as well (column 2, lines 1-3, 31-36; column 3, lines 38-41). Tse et al. further teach the motion/orientation sensor (116; see

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Figure 4, 7) connected to a microcontroller (122) that disables the power to the heater (12) (column 3, line 39 – column 4, line 67) to prevent hazardous situations when the heating appliance is left unattended (column 1, lines 28-31), thereby increasing the operational safety of the device. In view of Tse et al., it would have been obvious to one of ordinary skill in the art at the time of the invention to place a motion detector and controller in the operational handle of the shaving device to detect motion and prevent hazardous situations when the heating appliance is left unattended, thereby increasing the operational safety of the device.

29. Claim 15, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (U.S. Patent No. 5,064,993) in view of Johnson (U.S. Patent No. 3,093,724) as applied to claims 1-5 and 7-14 above, and further in view of Shalev et al. (International Publication No. WO 03/009976 A1).

Hashimoto in view of Johnson discloses all of the claimed limitations, as previously set forth, except for a motion detector adapted to detect motion of said heat-generating elongate element in relation to the skin.

However, a motion detector in a hand held electrical heating appliance to disable a heat generating means and control the width of a heating element is known in the art. Shalev, for example, teach a velocity detector (1070) or a mechanical velocity detector (1062) that is used to determine velocity. Shalev et al. further teach the advantage of such a configuration provides the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements (page 17, line 26 – page

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19, line 4). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hashimoto in view of Johnson with the motion velocity detector (1070, 1062) in order to provide the ability to detect variations in velocity, thereby varying temperature, pulsation rate and/or width in heating elements.

Response to Arguments

30. With respect to applicant's reply/argument that "In order to avoid burning of the skin, the device of Johnson has one set of teeth longer than the other set, so as to ensure that the longer set of teeth touches the skin and the wire blade which is positioned in the opening does not contact the skin", the examiner respectfully disagrees. The examiner can find no disclosure to such a teaching in Johnson. Johnson discloses one set of teeth being longer than the set of teeth, however, there is no disclosure or teaching to why. Furthermore, Johnson explicitly discloses "the blade being adjustable downwardly with the slot to expose it below the shorter teeth for maximum singeing effect" (column2, lines 4-6, claim 2). There is no disclosure to how far the blade may be adjusted downwardly below the shorter teeth, however, there is disclosure to the exposure of the heated blade being below the shorter teeth which would contact skin.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN J. RALIS whose telephone number is (571)272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen J Ralis/
Examiner, Art Unit 3742

Stephen J Ralis
Examiner
Art Unit 3742

SJR
April 2, 2009